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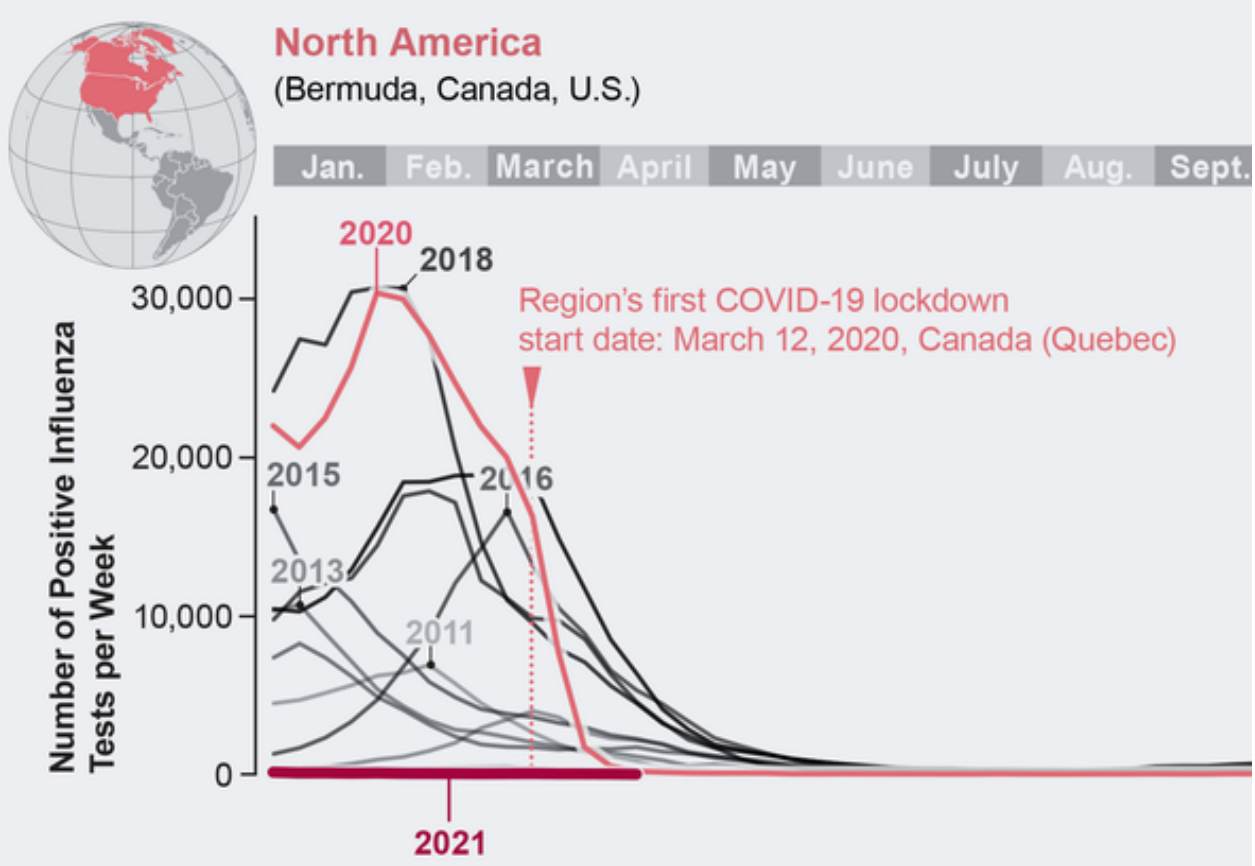
PUBLIC HEALTH

Flu Has Disappeared for More Than a Year

Mask wearing, social distancing and other steps to stop COVID-19 have also curtailed influenza

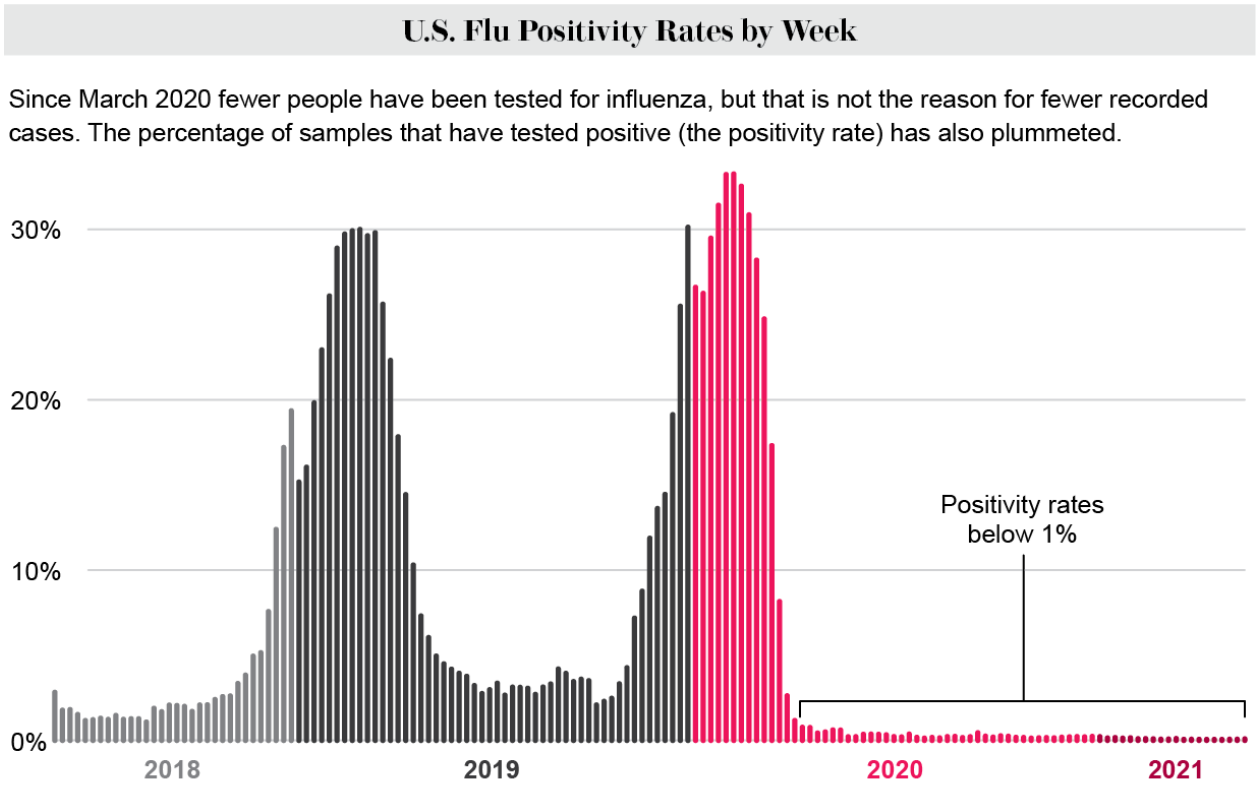
By Katie Peek on April 29, 2021



Credit: Katie Peek

Since the novel coronavirus began its global spread, influenza cases reported to the World Health Organization from the Northern and Southern Hemispheres have dropped to minute levels. The reason, epidemiologists think, is that the public health measures taken to keep the coronavirus from spreading—notably mask wearing and social distancing—also stop the flu. Influenza viruses are transmitted in much the same way as SARS-CoV-2, the virus that causes COVID-19, and they are less effective at jumping from person to person.

As *Scientific American* reported in November 2020, the drop-off in flu numbers following COVID's arrival was swift and global. Since then, cases have stayed remarkably low. "There's just no flu circulating," says Greg Poland, who has studied the disease at the Mayo Clinic for decades. The U.S. saw about 700 deaths from influenza during the 2020–2021 season. In comparison, the Centers for Disease Control and Prevention estimates there were approximately 22,000 U.S. deaths in the prior season and 34,000 deaths two seasons ago.


U.S. Flu Positivity Rates by Week
Since March 2020 fewer people have been tested for influenza, but that is not the reason for fewer recorded cases. The percentage of samples that have tested positive (the positivity rate) has also plummeted.
30%
20%
10%
0%
Positivity rates below 1%
2018
2019
2020
2021

Credit: Katie Peek; Source: FluNet/Global Influenza Surveillance and Response System at the World Health Organization (*data*)

Because each year's flu vaccine is based on strains that have been circulating around the world during the past 12 months, it is unclear how the upcoming 2021–2022 vaccine will fare should the typical patterns of infection return. The WHO made its flu strain recommendations in late February as usual, but they were based on far fewer cases than normal. Yet with less virus circulating, there is a reduced chance of mutation, so the upcoming vaccine could be especially effective.

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Public health experts are grateful for the reprieve in cases. If the future includes more hand washing, face covering and temporary social distancing when people become sick, perhaps flu seasons can be less severe, even as health restrictions lift and groups gather together again.

Weekly Influenza Cases (2010–2021)

The World Health Organization tracks influenza activity in 18 transmission zones. In temperate regions, cases are generally high in winter and low in summer, but they have been extremely low for a year. The weekly tally counts only people who are tested for influenzalike illnesses—typically about 5 percent of those who fall ill.

Gone Missing

When *Scientific American* first published influenza data in November 2020, the 2020–2021 flu season looked like a possible no-show. Since then, cases around the world have remained near zero.

KEY

Cases before COVID-19

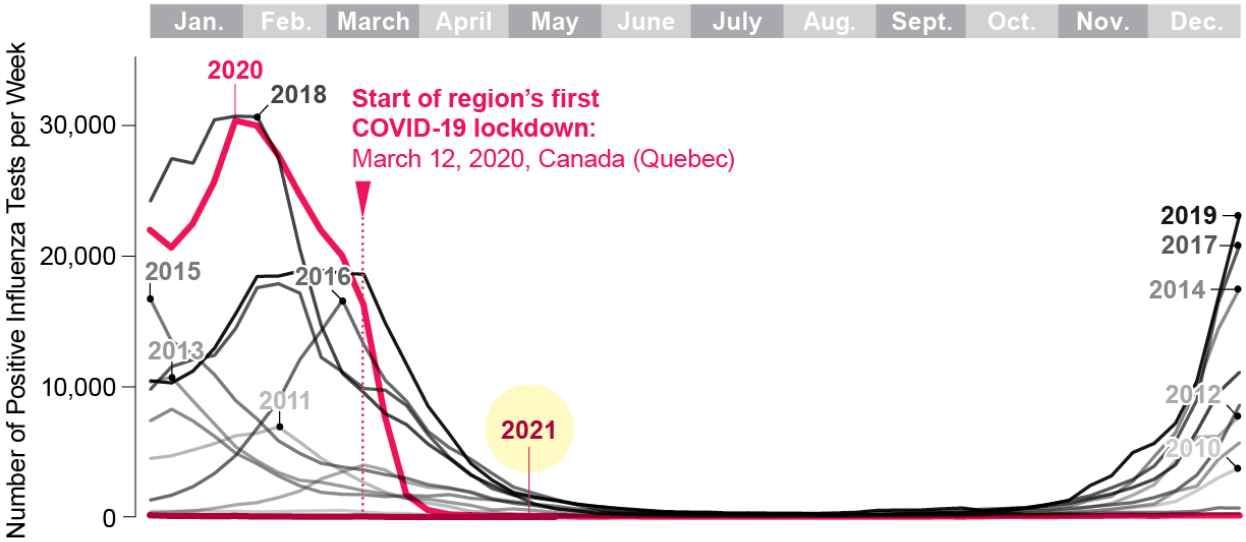
Cases during 2020 and 2021

All data as of June 1, 2021

North America (Bermuda, Canada, U.S.)

Unprecedented Drop

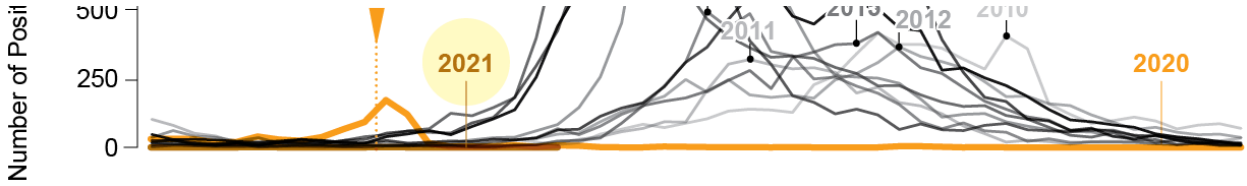
In the Northern Hemisphere, flu cases are minimal during summertime. But throughout winter 2020 and continuing through spring 2021, they stayed near zero—skipping the usual winter season.



Temperate South America (Argentina, Chile, Paraguay, Uruguay)

Clear for a Year

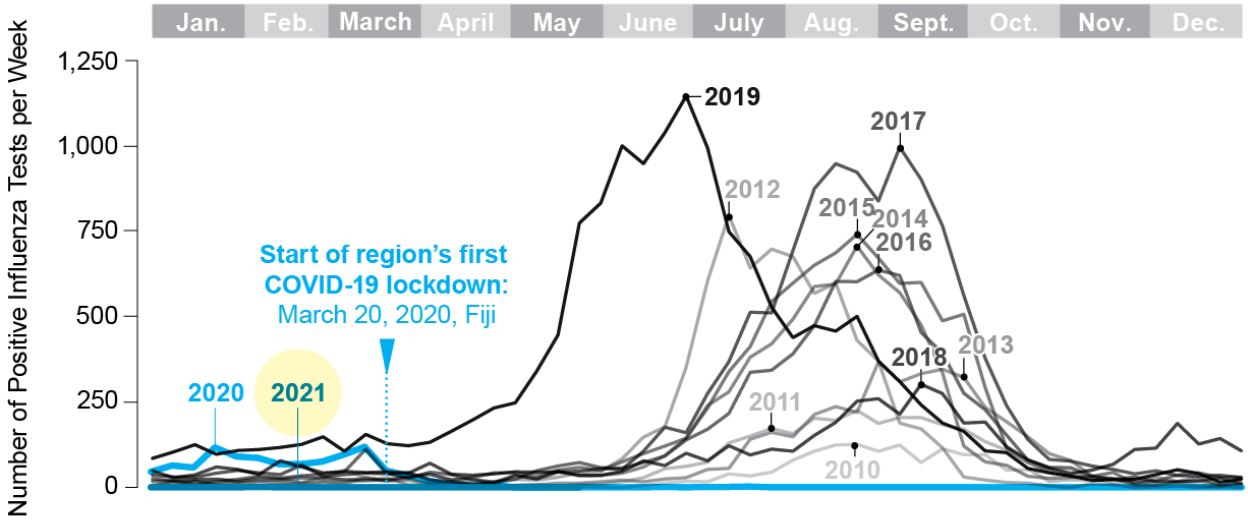
As COVID spread in April and May 2020—the start of winter in the Southern Hemisphere—influenza cases went quiet. The flat line has continued.



Oceania (Australia, Fiji, New Caledonia, New Zealand, Papua New Guinea)

No Flu to Catch

Australia's early, aggressive lockdowns kept COVID in check. But even where people have been gathering normally, flu has been absent. Kanta Subbarao of the WHO suspects the early lockdown cut flu circulation, and closed borders have kept it out.



Credit: Katie Peek; Source: FluNet/Global Influenza Surveillance and Response System at the World Health Organization (*data*)

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ABOUT THE AUTHOR(S)

Katie Peek is a science journalist and data-visualization designer with degrees in astrophysics and journalism. She is a contributing artist for *Scientific American*.

Credit: Nick Higgins

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